THE VETERINARY RECORD

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The "National" Meeting at Leeds.

Next week the National Veterinary Association meet for the sixteenth time, and no sign of waning vitality is visible. The meeting will be a business one with three papers to discuss—all interesting. On the second day members are invited by the Yorkshire Veterinary Medical Society to join them in an excursion to Kirkstall Abbey. Scarborough is not far off, and Harrogate is near. Members who desire to make Leeds merely the first step in a holiday trip will find it a convenient centre from which to radiate.

The papers for discussion have been posted, but it is always possible for a wrapper to get loose or a name to be missed. Any member who has not received his papers will oblige by sending a post-card to the Secretary. All practitioners in the North who are not members of the Association should take the opportunity of joining. The subscription is 10s. 6d. per annum, and no one need miss the Leeds meeting under the idea that it is too late. He has only to send his nomination to Mr. Somers or Mr. Hunting to ensure being enrolled.

One important question arises at every annual gathering—where to meet next year, and the selection is made by the members. It is important to choose a place where a welcome is certain, and it is only fair to change the district so that every member may look forward to have a meeting in due course in his own home radius. The "National" has never yet been to Ireland nor into the West of England. The choice is, of course, influenced greatly by probability of success. Wherever we go we want a full attendance of members, and especially a zealous feeling among the local practitioners, from whom the Provisional Committee must be selected.

The Veterinary Forge.

A number of successful prosecutions have been conducted by the Royal College of Veterinary Surgeons against owners of shoeing forges for using the descriptive word "veterinary." The members of the profession never describe their own shoeing shop as a "veterinary forge." There is no necessity to do so, and our Council object to the title being used, by men who have no right to it, simply as a protection to the public. There is between a veterinary establishment and a shoeing forge no necessary connection, but the public decidedly associate the two, and if a forge is described as "veterinary" they quite naturally expect that special knowledge is to be found there, not only concerning horse-shoes but relating to the feet and lameness, or even disease. This association in the public mind of horse-shoeing and horse-doctoring is quite natural; the two callings are often conjoined, and not a long time back were almost constantly combined.

Specialisation has divided them, and the doctoring has developed into a profession, but still the original connection is maintained. A very fair proportion of veterinarians in towns practice their special profession and carry on the trade of a farrier. Is there anything derogatory in this? It is hardly an answer to say that no honest business is "common or unclean," for there may be some inconsistency between two callings that renders their association inexpedient. That horse-shoeing is an honest and respectable calling goes without saying, and some of the veterinary surgeons who keep shoeing forges are among the richest and best in the profession. The question may be brought to a more direct issue, perhaps, if we ask—Is it derogatory to a professional man to carry on a trade from the same premises as those from which he conducts his profession? Is the answer to this question affected by the fact that the trade is one intimately connected with the profession?

Persons who argue that having a farrier's shop is derogatory to a veterinary surgeon mean, of course, that the public look upon a professional man as filling a higher social sphere than a tradesmen. But the same public glorify a rich tradesman, and contemptuously patronise a poor professional man. It is a question whether the public quite recognise veterinarians as professional men, and it is certain they do not distinguish any shades of difference between those who keep shoeing forges and those who do not.

Possibly, if the connection with the forge were broken, and no veterinary surgeon had a shoeing shop or a livery stable, the public would more generally recognise them as members of a learned profession. We believe the connection will cease in time by the development of the scientific and professional side of our calling, but we by no means believe the purely professional man will be a better practitioner when he ceases to be a tradesman. Shoeing is so intimately connected with the lamenesses of the horse, that a man ignorant of shoeing is wanting in some knowledge that is indispensable in a veterinary surgeon. When we have all risen from the derogatory forge to the æsthetic consulting room we shall often have to ask the advice of the farrier. Will that be derogatory?—possibly not, for by that time the farrier will be an educated expert—a specialist able to advise.

CASES AND ARTICLES.

MILK FEVER.

By D. Pugh, F.R.C.V.S.

In an article in *The Veterinary Record* some time ago I stated that I considered milk fever to be caused by ptomaines, the products of decomposition of foods in the digestive canal of the cow. I do not intend to deal in detail with this subject at present, but merely wish to state a few facts, as far as I can interpret them, and then comment a little on Schmidt's treatment.

Food may remain and ultimately decompose in the rumen a fortnight before milk fever sets in, of which I have positive proof.

Fluids extracted from the stomachs of the cow immediately she falls with milk fever, and before she has had any medicine whatever, if given to a healthy animal produce severe but temporary constitutional derangements.

My object in treatment has been to check fermentation going on in the stomachs, and to eliminate from the blood stream all poisonous products which have been absorbed. Agents which one would resort to for the latter purpose, that is to excite the natural outlet (kidneys) for all foreign materials in the blood, would, if given by way of the stomach, render the poisonous contents more soluble, and therefore more quickly absorbed. To guard against this possibility I tried hypodermic, intra-tracheal, and rectal injections. The intra-tracheal was unsatisfactory, but the hypodermic certainly gave encouraging results, but had the disadvantage of not being able to introduce sufficient fluid for absorption, and secondly that at the seat of injection, when iodide of potassium was used, a large hard swelling would remain for weeks. The enemas did not have an extended trial owing to the difficulty in getting the rectum clean, although my assistant, Mr. F. C. Gillard, M.R.C.V.S., had one very successful case when treated in this way. To inject the udder never occurred to me until Schmidt's report, whose idea I gather is to check a supposed decomposition of colostrum corpuscles by injecting a solution of potassium iodide into the galactiferous sinuses and leave it there for absorption. But why leave the solution there for absorption into the blood stream? If the ptomaines which cause all these symptoms in milk fever are produced in this particular part of the animal's economy surely it would be better to allow the fluid, with its poison laden products, if so it be, to escape again through the syphon than allow it to be absorbed, and then excreted by the kidneys. Personally, I feel grateful to Schmidt for demonstrating the possibility of such large quantities of fluid being taken into the body through such a channel without much risk of injuring the gland structures, and thereby affording us a means of flushing, if I may so term it, the vascular system. The fluid thus absorbed is rapidly excreted by the kidneys, which can be easily demonstrated by inserting a catheter into the bladder and fixing it there by passing a safety pin through the loop at the end of the instrument and a portion of the vulva, after the urine has entirely stopped running, inject your solution of potassium iodide, and in a surprisingly short space of time urine will run through the catheter in a little stream.

Having adopted Schmidt's method of injecting the udder in several cases with beneficial results, and without having mammitis as a sequel, I look upon it as a valuable adjunct in the treatment of this disease.

ON CATTERIES.

Cats in a state of nature do not associate or even hunt in company. They are not gregarious animals, and the sexes only come together at certain times, or associate at most in pairs. Their natural habits are such that no great number could live together, and their excreta is so objectionable that a special instinct is given them to bury it.

They are proved to be unfit for association in a confined space although as individuals so conspicuously domesticated. Most of the dog and cat "homes" are known to me; I have kept one myself, and after about thirty years experience of cats I have come to the conclusion that a cattery, or a doggery for that matter, is an unnatural and unwholesome institution, prejudicial to the health of animals kept in it.

I know how convenient a well arranged cattery is to the fancier and the breeder, how almost indispensable to the maintenance of pure breeds, or even the possession of valuable cats, but I maintain that with the utmost cleanliness and most thorough sanitation, it is well nigh impossible to keep cats healthy in them for any length of time. Let me here anticipate contradiction by saying that I have known such places carried on successfully for several seasons, but sooner or later disease has broken out and swept away the anticipated profits of years. The breeder has perhaps been at the business long enough to get a reputation, has a number of kittens which will soon be ready to go away, when a malignant typhoid or distemper breaks out, and he is lucky if he does not cause the death of other folks' cats as well as his own.

As with fowls, so with cats, you may not immediately incur the penalty of defiance of nature's laws, but your "stenched" poultry-run and overstocked cattery form a seed bed of disease, and the germ will one day fall into it and cause disaster. A cat, or two or three cats will remain healthy with the run of a dwelling house and a garden, but the little square spaces that pass for gardens in town soon become saturated, and need to be freshened by digging in lime after letting it "slack" on the surface.

If it is impossible to do without a cattery, it should be capable of removal and conversion to the purpose of a fowl house after being used for a time. My own plan is to buy cheap boxes, such as Tate's cube sugar cases and fit them with rough doors. The frames of the doors I make of tile battens and cover with common wire netting, cross garnet hinges, and a hook and eye. These cages can be fitted up for about one

shilling, and for every cat one wants two, or better three of them. I do not find any disinfectant as good as fire, and my plan is to first wash and dry the box, then brush it over with paraffin, put in some paper saturated with it and set light to the lot. The flare and black smoke soon clears, but the box is not so quickly burned as one at first fears. It is better to beat out the flames than to put them out with water, but either will do. The woodwork is then found to be lightly charred all over, and the netting whitened here and there, perhaps a weak place requiring a wire tie. This performance can be repeated a good many times before the box is destroyed, and then the hinges and fasteners are good enough to be used again.

I do not believe that any disease germs can survive this treatment, and I doubt if any other disinfectant is effectual. The most thorough sanitation is practiced at the Dogs' Home, ably directed by zealous officers, and not stinted for material, yet the place is always infected with husk, and will continue to be so unless it is burnt down. It is of course a defiance of natural laws to bring together thousands of carnivorous animals, and never to have the place free from them.

Catteries may be so large and commodious, with runs and grass, and the number of animals kept in them so small, that my remarks on catteries in general will scarcely apply. Of such are those advocated by Mr. Jennings whose plans are reproduced in his work on cats, for those who care to afford feline palaces.

"MEEOW."

DELAY IN THE ACTION OF BARIUM CHLORIDE.

By HENRY GRAY, Kensington, W.

Experiences teaches that when intestinal stimulants, such as barium chloride, eserine or pilocarpine, are intravenously injected after the use of sedatives, especially opium or its alkaloid, in the treatment of constipation-colic delayed action of the bowels results, although pain is removed in the majority of cases after the initial effect of the drug injected has passed away. Again, in the majority of cases of gastro-enteric catarrh, the action is likewise; yet, in some cases straining is caused, and rupture of the large intestine, whether colon or rectum, is possible. They are dangerous drugs in the treatment of gastric tympany associated with the mesenteric abscess of strangles. I have seen four cases of ruptured stomach follow the use of these drugs in gastric tympany, probably caused by mesenteric abscess, which was present in all four cases. Further, they seem to have no stimulating action on the intestines or stomach when these organs are the seat of perforation or rupture, or twist of the former. But they kill the patients quicker.

They are useful drugs, if skilfully used, in the treatment of constipation-colic, and colic due to indigestion. In the majority, if not all, of these uncomplicated cases, a dose of barium chloride is sufficient to put the animal straight for work. I have frequently seen barium chloride cause slowing action of the heart, with pallidity of the tongue, etc. In one case, that of an old thorough-bred horse, facial paralysis followed the use of pilocarpine.

CLASSIFICATION OF CLIENTS.

By HAROLD LEENEY, M.R.C.V.S.

Veterinary surgeons, like other professional folks, have to deal with all sorts and conditions of men in the conduct of their business, for business it is, although that fact is conveniently kept out of sight. The less we dwell on the business side of our calling the more likely are we to attain good results in a professional sense.

It is always a painful thing to a conscientious practitioner to feel himself hampered by the low value of his patient, and in this respect he is legitimately envious of the sister profession whose alumni are taught to regard the lives of patients as absolutely sacred and to be prolonged by all possible means, even at the expense of continual and useless suffering by the objects of their solicitude.

Well, let us be thankful we can call in the knacker sometimes as a set off against our other disadvantages.

In the medical man's pocket diary is to be found a graduated scale of charges based upon the rental of patients' residences. A rough guide truly, as to their incomes and capacity to pay, but better than a wooden rule of the same fee to everybody.

There is room for a little more classification of our clients, but we have to educate them up to it. Everybody knows that a human practitioner charges the squire and the parson more than the farmer and labourer, and none object; it would not be decent to do so on the part of those at the top, and those at the bottom of the scale have no need.

As a rule, it is we who have to complain of a custom (inherited) of charging the same fee for castrating and other services, whether it be to the Lord of the Manor or to a cottager, but this difficulty should be lessened with our improved status. Now that we can associate on equal terms with other professional men, and come into personal contact with the better class of clients, we may educate them into understanding that we do not charge them *more*, but the cottager *less*.

The difficulty, outside of competition, which is perhaps the most grievous of all, is that when we consent under promise of secrecy to make a concession to one man, we are met with a demand for a like reduction on all sides.

The members of every calling gradually learn to think that their's combines the greatest number of difficulties and disadvantages, and the minimum of remuneration, and we are no exception to the rule. We honestly believe that the man who can successfully carry on a veterinary practice has abilities, which, in any other walk of life would have made him a prince among men, or seated him on the woolsack at least.

We are not able, like the tradesman, to make a bargain beforehand as to price, indeed we do not ourselves know what amount of service may be required, and so it happens that we have to trust the wealthy and liberal, the mean but wealthy, the spendthrift, and the bankrupt alike. We cannot first enquire of the trade protection society, but must attend when called, or suffer worse consequeces than an occasional bad debt.

VETERINARY SOCIETIES.

WESTERN COUNTIES VETERINARY MEDICAL ASSOCIATION.

A special meeting of the committee of the above Association was held at one p.m. on July 19th, at the New London Hotel, Exeter. Present: Messrs. Harvey, (President) Elder, Penhale, (Barnstaple) Heath, Nelder, Bloye and Dunstan (Hon. Sec.)

The first business was the consideration of the proposal to invite the National Veterinary Association to visit Devonshire next year, and on the proposal of Mr. Heath, seconded by Mr. Penhale, it was decided that an invitation be sent, signed by the President and Secretary.

The question of raising the necessary funds was then gone into, and it was decided not to touch the funds of the Association, but to endeavour to raise the amount by individual subscription, several promises of substantial sums having been already received. Other matters in connection were mentioned, but it was decided to do no more until the invitation had been accepted.

THE DUBLIN CONGRESS OF THE INSTITUTE OF PUBLIC HEALTH.

The Committee, taking into consideration the importance to the veterinary profession of the above, more particularly the subject of tuberculosis, which is to form the subject for discussion at the veterinary conferenre, and which has assumed such importance from a public health point of view, since the issue of the report of the recent Royal Commission, recommended on the proposal of Mr. Penhale, seconded by Mr. Elder, that the President and Secretary visit the congress as delegates from the Western Counties Veterinary Medical Association, and that a sum not exceeding £10 be allowed each delegate to defray expenses. This was unanimously agreed to by those present, but as the committee had no power to carry it into effect without the consent of the members as a whole, a circular letter was issued to each member, with the result that the action of the committee has been unanimously supported.

JOHN DUNSTAN, *Hon. Sec.*

Street Filth.

LISTERIAN writes: I am delighted to read your paragraph on the above in *The British Medical Journal* of May 21st. But prevention is better than cure. Why not have a non-porous apparatus attached to the centre of the inferior portion of the bellyband of the horse, passing backwards between the hind legs, gradually widening, and fastened to the body of the vehicle far back? A well with a light valve at the top might be part of the apparatus for the offending matter to sink into. The eye and nose would not then be offended, and the disgusting state of the London streets might be greatly lessened. Of course this does not solve the problem of unattached horses; but surely in this inventive age some genius might introduce an apparatus that would be of real benefit to the human race. The inventor would at least have the grateful thanks of many sufferers. —*Brit. Med. Jrnl.*

NEW BOOKS.

THE INFECTIVE DISEASES OF ANIMALS.

The preeminence of Friedberger and Fröhner's work on *Veterinary Pathology* has long been recognised, and French and German editions of the book have been used by veterinary students in this country. Unfortunately, very few of our students or practitioners are able to use these continental editions, and we have sustained a consequent great loss. Captain Horace Hayes is entitled to the gratitude of the profession for having at his own cost undertaken an English translation of this work, and we now have the first volume, under the title *Infective Diseases of Animals*. The translator has done his work well, and given us a book in sound, clear English, which will be a safer guide to student and practitioner than even the original work, save, perhaps, to a few accomplished linguists. This volume appeals to the medical reader as well as the veterinary, for, as the preface says: "Owing to the fact that the infective diseases of animals can in many cases be communicated to man, and that their occurrence in our meat and milk producers is a serious question of public hygiene; the present part of this translation will appeal to doctors as well as to veterinary surgeons." We would go further and say that as the unity of pathology in all animals in now well recognised, no medical man—certainly no medical officer of health—can complete his education without a study of this volume. The extent of the work is not to be measured by the 500 and odd pages it covers. It includes the infectious diseases of all domestic animals, of some wild ones, and of birds, whilst special reference to the human being is given with all the plagues transmissible to the higher animal. The importance of this is obvious, when such maladies as variola, anthrax, tuberculosis, and others are under discussion.

In an Appendix, the translator has supplied the omission in the original "of articles on Surra, South African Horse-sickness, Australian Tick fever, Ixodic anæmia in Jamaica, and Louping ill. Frequent footnotes help to bring the subject up to date, and occasionally to qualify statements of the Authors, by submitting opinions of leading English veterinarians. Whether considered as a work of reference for busy practitioners, as a text book for students, or as a treatise on pathology in its widest significance, this volume meets every requirement, and is an invaluable addition to our literature.

Each disease is considered systematically in sections. If we take as an example—Strangles, we find it treated under the following sectional heads:—Etiology, Pathogenesis, History, Symptoms, Complications, Differential Diagnosis, Prognosis, Therapeutics. To enter into any detailed criticism would be worse than superfluous. The authors are masters of their subject, and the translator has done them full justice.

Messrs. Thacker & Co. are the publishers. Many previous books written by Captain Hayes, and issued by this firm, have demonstrated the first-class manner in which they do their work. This volume is no exception.

EXTRACTS AND NOTES.

THE NEW LABORATORIES OF THE BRITISH INSTITUTE OF PREVENTIVE MEDICINE.

The new building which has now become the permanent home of the British Institute of Preventive Medicine is situated on the Thames Embankment, near Chelsea Bridge. The site chosen is well adapted for the purpose, as it faces an open space, with a clear light aspect on all sides. The building is detached, stands in its own grounds, and has a good frontage to the river. The site was acquired from the Duke of Westminster, who is a member of the Council of the Institute, and building operations were commenced in the autumn of 1894.

Administration.

The ground floor contains the Board room and general offices, together with a waiting room. To the right of the main entrance is the director's private office, together with two laboratories for himself and his assistants. These laboratories will accomodate six workers, and are fitted up with the usual appliances for bacteriological investigation.

Bacteriological Laboratory.

The main bacteriological laboratory is situated at the back on the ground floor, and occupies the entire length of the building. It has accommodation for twenty-five students, and has the advantage of a north light for microscopical work. The working benches are of teak. and are provided with gas, water, and electric light.

Each worker is provided with a complete set of apparatus for his work, as well as with a set of drawers and lock-up cupboards. For dissections and aseptic operations a glass top table is provided. The incubators stand on slate tables, and a special glass blowing table has been provided. At one end of the room is a fume chamber, and a wash-up sink with hot and cold water.

A small room in connection with this laboratory will admit of operations being carried out under the best conditions for aseptic work. The floor is concrete, the benches of slate, and the walls covered with glazed tiles.

This laboratory will be mainly utilised for instruction. The Institute has already attracted workers from all parts of the world, and the number will no doubt greatly increase with the enhanced facilities of its new building. The courses of instruction are attended by qualified medical men, army surgeons, and students of hygiene. The students of hygiene will receive a course of bacteriological instruction specially suited to their requirements, and dealing with the bacteriological examination of water, soil and air, food stuffs, etc. A course of systematic bacteriology will also be given, and will comprise lectures and practical work. This practical instruction will extend over three months, and following the methods adopted at the Institut Pasteur, will touch on all the phases of bacteriological work. From time to time six weeks' courses will be given, dealing especially with bacteriology in relation to clinical work. This laboratory will also be utilised to give those desiring it a thorough grounding in bacteriological methods, with a view to subsequent research work.

The Photographic Laboratory.

The back of the basement is devoted to photography. In a large room are provided two complete photomicrographic cameras, one for use with the electric arc light, and constructed to carry out work with the highest powers, and the other to be used for lower power work, and also for purposes of preliminary instruction. The larger form of apparatus is of the latest design, with some new features introduced to facilitate its working. Thus there are two brickwork and masonry supports for these cameras to ensure firmness and freedom from vibration, and each one is so placed that a curtain can be drawn at any moment to effectually screen off either apparatus. Attention will be given to the application of photography to spectroscopy, so far as it is applicable to bacteriological research, and apparatus will also be provided for photometric observations. It is hoped later to establish a lantern-slide library, when illustrations for lectures on any branch of work carried on at the Institute will be available. This department is under the care of Mr. J. E. Barnard, who is responsible for many of the fittings.

The Chemical Laboratory.

The large chemical and water laboratory is situated on the first floor. It contains all appliances for chemical work, and working accommodation for twenty men. The two fume chambers contain water and gas supply which can be regulated withcut opening the chambers. In this distilling and evaporating operations can readily be carried on. There is also a special hooded chamber for water baths. The teak benches have amply water and gas supply, as well as taps and wastes for distilling purposes, and an electric light supply. The centre bench also contains an experimental main which will allow of electric currents of any strength being used. This main is regulated by means of a motor transformer in the basement. Provision is likewise made in the basement for elementary organic analyses in the shape of a combustion furnace. In this room investigations of a chemical character and bearing on hygienic and preventive medicine will be conducted, and it is hoped the laboratory will become a centre for the investigation of matters concerning public health. The chemical analyses of water are conducted in this room, and a number of samples are received from local authorities for this purpose. Here also the necessary instruction in chemistry and physics for public health work is carried on, and special instruction also given in water analyses. It is intended that the general training given shall be of a thorough character, and compare with that given in hygienic institutes on the Continent. A small meteorological station will be erected for the use of the students. The laboratory is in charge of a trained chemist, who devotes his whole time to this work.

The Chemico-Bacteriological Laboratory.

Perhaps the most important laboratory, certainly that from which we shall expect the most important results, is the Chemico-Bacteriological Laboratory. Here will be conducted, under the supervision of the director, such investigations as relate to what may be called the physiology of bacterial life—the chemical products of the pathogenic bacteria and the chemistry of fermentative processes. The growing importance of this kind of work has rightly led the Institute to provide for its being carried on under the best possible conditions.

Private Research.

At the back of the building on the same floor are two rooms for private research work, a private chemical laboratory, and the balance room. Further provision for private research is made on the floor above, where are a series of rooms. These will be fitted up as occasion demands according to the work in progress.

Vaccine Laboratory.

On the same floor are the laboratories and office that are to be used by the Local Government Board for the preparation and storage of glycerinated calf lymph.

Museum and Lecture Theatre.

The museum is situated on the third floor. It consists of a large room with a gallery and two bays. It is hoped in course of time to form a collection of pathological specimens. Attached to the museum is a preparation room. On the third floor is the lecture theatre, with accommodation for 150. The room can be darkened, and the lecture table is designed to afford facility for demonstrations. It is furnished with a sink, water, electric light, and a terminal of the experimental main. Ample provision is also made for lantern demonstrations.

Crematorium and Animal House.

In the yard behind the Institute is a large crematorium in which all infectious material will be destroyed. There is also a large animal house with loose boxes. A small laboratory is also attached to the building. The construction of the animal house allows of thorough disinfection, and the cages for the smaller forms are made of galvanised iron, so that they can be sterilised.

Electric Supply.

The whole block of buildings is lighted electrically, the current being taken from the mains of the local company. Current is supplied for experimental purposes by a distinct system of mains, which are carried into the various laboratories to terminals, to which temporary connection can be readily made. This main is fed by a motor transformer, taking current from the supply at a pressure of 200 volts, and allowing of it being supplied at any pressure from 5 to 50 volts. This arrangement, suggested by Mr. Middleton, avoids the necessity of the cumbrous and wasteful resistances usually employed.

General Work of the Institute.

The director and staff are to be most heartily congratulated on coming into possession of this well-equipped laboratory. At present a large amount of diagnosis work is being undertaken for sanitary authorities, and a staff is kept constantly engaged in examining and reporting on waters, sputa, and various organic fluids. The aim of the director is to make the Institute a national home for bacteriology in all its branches.

The present staff is as follows; Director and Honorary Secretary: Dr. Allan Macfadyen, to whose enthusiastic industry the new laboratories owe many of their best features. The bacteriologists to the Institute are Dr. R. T. Hewlett and Mr. Foulerton, F.R.C.S. Dr. Arthur Harden is chemist, and Mr. C. Cooper assistant secretary. The department for the preparation of antitoxins remains at Sudbury, near Harrow, and is in charge of Dr. Dean, assisted by Dr. Salter.—*The British Medical Journal.*

PROFESSIONAL CHARGES.

Some rather curious evidence was led before Sheriff Campion in the Dumfries Sheriff Court concerning a cow warranty case. The case was at the instance of Mr. William Wright, veterinary surgeon and cattle dealer, Thornhill, against Mr. James Pender, Morton Mains, for repetition of the price of a cow which was alleged to be disconform to warranty. Pursuer claimed that she was "light" in the "off" teats, and the usual conflict of "expert evidence" arose as to whether this was the result of a disease of old standing, or whether it might have been due to a chill contracted at the auction mart. As several veterinary surgeons had been called in to examine the animal, the fees of these professional gentlemen had also to be adjudicated on, and some of the evidence in regard to the fees charged by the different experts was rather amusing.

Pursuer deponed that, if he was called in as a V.S. to examine a cow, he would charge a guinea if he could get it. The general charge for an examination was 10s. 6d. It was not the case that five shillings was the regular fee.

Mr. T. A. Douglas, V.S., who was a witness for pursuer, deponed that he charged a five-shilling fee for examining a cow for unsoundness.

Mr. T. Campbell, F.R.C.V.S., Kircudbright, who was a witness for the defence, said there was a distinct scale of charges in the profession. When he was called in to examine an animal, just off the street as it were, his charge was one guinea. The ordinary charge was five shillings. If you had to give a written certificate, the charge for a horse was half-a-guinea; for a cow, five shillings. Insurance companies only allowed two shillings. His assistants, qualified veterinary surgeons, only received five shillings.

Cross-examined: Why is it that your assistants' charge is five shillings and your own a guinea?—Mr. Campbell: Because I'm not only a veterinary surgeon. I am a specialist in some things; and I have got to the top of the tree when I am taken to England, Ireland, and Scotland in some cases. I am a Fellow. I can't get any higher; but if I could I would make a shot at it.

Mr. Alex. Levie, V.S., Thornhill, son-in-law of the preceding witness, said that, when called in to examine a cow in Thornhill. he got half-a-crown, and was quite satisfied with that. Five shillings was quite a legitimate charge, but half-a-crown was the average. If you had to report on an animal, you charged as high as a guinea or two guineas if you liked. Half-a-guinea was the common charge. It depended on your client.

After hearing a lengthened proof, the Sheriff adjourned the case for debate.—*The North British Agriculturist.*

PROSECUTION IN DUBLIN BY THE R.C.V.S.

In the Southern Division Police Court on Friday, July 29th, before Mr. Swifte, Mr. James Whelan (trading as Whelan Bros., 15A Merrion Row) was summoned at the instance of the Royal College of Veterinary Surgeons for that he "not being on the Register of Veterinary Surgeons, and not holding at the time of the passing of the Veterinary Surgeons' Act, 1881, the veterinary certificate of the Highland and Agricultural Society of Scotland, did unlawfully use and take an addition and description, viz.—'Veterinary Farrier'—thereby stating that you were specially qualified to practice a branch of veterinary surgery."

Mr. Hedley, F.R.C.V.S., Chief of the Veterinary Department of the Privy Council, was present in Court.

Mr. Blood (instructed by Mr. B. M. O'Grady) appeared on behalf of the prosecutors, and said that Mr. Whelan carried on business as a farrier, and under the 17th section of the Veterinary Surgeons' Act, 1881, it was provided that any person who after the 31st of December of that year was not on the Register of Veterinary Surgeons takes or uses the title of veterinary surgeon, or makes use of the name, title, or description, shall be liable to a fine not exceeding £20. It had been decided in the English Queen's Bench that using the words "veterinary forge" over a door was an offence. In this case Mr. Whelan had the words "veterinary farrier" posted over his door, and that was what was complained of. The case was a very simple one, and they had no complaint against the defendant except that he had contravened an Act which was for the protection of the profession of veterinary surgeons.

Mr. Swifte said the case appeared to him to resolve itself into this—whether or not the defendant admitted or denied the offence.

Mr. Blood said probably Mr. Whelan would simplify the matter by pleading guilty.

Mr. Swifte.—Do you plead guilty, Mr. Whelan.

Mr. Whelan said he had not consciously committed any offence. In a case before the Recorder in which the point or one similar arose the decision was given entirely in his favour.

Mr. Blood.—It must have been altogether on a different point.

Mr. Whelan said his qualifications had not been questioned, and were acknowledged by the late Professor Ferguson. He would hand up proof of this to his worship.

Mr. Swifte (having read the document referred to) said.—This is only to certify that you are a good horseshoer.

Mr. Blood.—We do not question his competency is that respect for a moment.

Mr. Whelan.—If they object, sir, I will take down the words.

Mr. Blood.—That won't do at all. It must be one thing or the other. If he does not plead guilty, we will proceed with our evidence.

Mr. Swifte.—Do you plead guilty or not?

Mr. Whelan.—I have a decision in my favour by the Recorder.

You are summoned for a specific offence, and you will please say do you plead guilty to it or not.

Mr. Whelan.—Well of course, I cannot avoid pleading guilty, but I am unjustly treated.

Mr. Swifte.—I fine you 5s. and £5 costs.

Mr. Blood.—It is only right for me to say that having got a formal notice some months ago to discontinue this thing he gave no reply whatever.

Mr. Whelan.—I will bring this matter before the Court of Queen's Bench.—*Evening Telegraph (Dublin).*

THE TOXIC ORIGIN OF DISEASE.

Abstract of the Address in Medicine by THOMAS RICHARD FRASER, M.D., at the annual meeting of the British Medical Association at Edinburgh, July, 1898.

It is strongly suggested that the structural changes found in many diseases may, after all, be mere manifestations of a toxic substance. This idea is rapidly becoming the predominant doctrine of the present-day conception of disease, and as investigation proceeds it is almost daily receiving support from new facts. It has been demonstrated that the body is constantly subjected to the risks of poisons produced within itself, as well as of poisons introduced into it from without. Many of the poisons produced in the body, such as the ptomaines and leucomaines, are of the chemical nature of the previously known alkaloids, and not a few of them rival the vegetable alkaloids in toxic power and reproduce their leading effects. Nervine, for instance, is lethal in minute doses, and acts in many respects like pilocarpin; while muscarin finds its analogue in the active principle elaborated by poisonous fungi.

The organism, even in a state of health, is a veritable storehouse of these toxic substances. Many of its normal constituents, such as potash salts and carbonic acid, are well-recognised poisons; many of the products of its glands, such as saliva and bile, contain toxic ingredients; many of the substances formed in the processes of disassimilation, and which enter such secretions as the urine and the intestinal canal, are capable of disordering health and even of endangering life; and in disorders of function, even if they amount to little more than mere disturbance of nutrition, poisons not found in the healthy body are generated and produce the symptoms of disease. By such toxic influences the symptoms of cholæmia, gout, rheumatism, uræmia, diabetic coma, stercoræmia, and probably also of chorea, sunstroke, neurasthenia, asthma and the idiopathic anæmias receive a sufficient explanation, even although the toxic substances have not in all cases been identified.

The widely acting pathogenic influence of poisonous substances has, however, received its most definite and convincing support from the remarkable discoveries in bacteriology which have signalised this period. The gravity and wide prevalence of infective diseases had rendered them a subject of special study from the earliest period. Rhazes in the seventeenth century propounded the view that small-pox was essentially a fermentative disease, and thus originated the doctrine of the fermentative nature of all infectious disease. Previously to this time a theory on the parasitic origin of these diseases had been propounded, and its more enthusiastic supporters gave a reality to their views by such statements as that syphilis was caused by a minute worm, and measles, small-pox, and plague by infusorial animals or invisibly minute insects. With the introduction of the compound microscope the parasitic theory disappeared in this gross form of it, and the fermentative theory was again adopted. It was not, however, until 1861, when Pasteur's great discovery of the nature of butyric fermentation was made public, that the sufficiency of the theory became revealed. His demonstration of the essential part played by minute living structures in the transformations which constitute the process of fermentation at length removed the process from the mysteries which had previously surrounded it, and opened up applications to the pathogenesis of infective diseases which have revolutionised medicine. He pointed out that the organisms of fermentation are similar to those which had already been discovered by Rayer and Davaine in anthrax. He subsequently demonstrated the virulent nature of the microbes of pyæmia and infected gangrene, and, following Koch's work on the cultivation outside of the body of the bacillus of anthrax, he proved also that this bacillus, as well as that of fowl cholera, is able, when grown in suitable media, to reproduce itself almost indefinitely, and to retain for many generations its power to cause the symptoms of the original disease when inoculated into animals.

The pathogenic action of the microbes was at first attributed either to mechanical obstruction of the blood vessels, caused by their accumulation in them, which resulted in asphyxia of organs essential to life; or to a biological action which enabled them to appropriate nutritive materials destined for the tissues of the body, and thus to deprive these tissues of life. While, in the case of a few of them, both of these actions may to a slight extent explain their effects, it was subsequently proved that these effects are mainly caused by the poisons which they produce. The poisons are of complex composition; some are alkaloids, and others modified proteids, and others, again, have altogether unknown chemical composition. Many of them are of extreme and almost indefinitely great activity: one milligramme, for instance, of the dry poisonous constituents of tetanus toxin is sufficient to kill a horse, or 600 million times its weight of living tissue; while the hyperthermal effects of tubercle toxin are appreciable when the dry toxin in doses of from one to two-tenths of a milligramme, is injected, representing a strong reaction on 60 trillions of its weight of living human substance. Like other poisons, further, they are capable of producing structural changes, exemplified in the skin eruptions produced by many infectious diseases; the focal necrosis of peripheral nerves produced by the diphtheria poison; the fatty changes and longitudinal fibrillation of the heart muscle produced by this poison, and also by that of anthrax; the cerebro-spinal meningitis produced by the poison of influenza; the anterior cornual and muscle degenerations and the neuritis pro-

duced by the poisons of tetanus and diphtheria; the acute parenchymatous and hæmorrhagic nephritis produced by serpents' venom; and in the production of nodules in the lungs, reproducing the characteristics of pulmonary tuberculosis, by dead tubercle bacilli.

Large numbers of disease-producing poisons are thus ever present in the body, created by the normal processes of life, and abundantly produced by departures, even in themselves unimportant, from these processes. Many substances well known to have poisonous properties are intentionally introduced into the body, such as alcohol, tobacco, tea, and opium, while others, such as lead, accidentally find their way into it. The respiratory passages and intestinal canal are crowded with micro-organisms, and they teem in the soil, air, and articles of food. Many of them are producers of virulent poisons, and when they effect a lodgment in the body and find conditions congenial to development, they proliferate with so great rapidity that a single bacterium may in twenty-four hours have multiplied itself into many millions of separate toxin-creating organisms.

In these circumstances, it is of interest to inquire what defence man and other animals can oppose to the disease and death-producing poisons by which they are so constantly endangered? Instances have long been known of the possession of defensive powers against the ordinary poisons, organic and inorganic. Certain animals are by hereditary endowment able to receive with impunity large quantities of poisons, which in minute quantities are hurtful to other animals, well exemplified in the enormous quantities of belladonna and opium which may be administered without injury to herbivora. It is also notorious that man and other animals may become so habituated to the action of several toxic substances that, in the course of time, doses greatly in excess of the minimum lethal are no longer able to cause death or even much inconvenience. Such aquired powers of defence are produced against arsenic, opium, alcohol, and tobacco, and they are also illustrated in the effects of nitrile ethers.

Explanations for these exceptional powers of defence have been found in the special activity of the processes of elimination, and particularly of elimination by the kidneys, whereby the quantity of poison requisite to cause injury is prevented from being present in the blood; in an unusual power of producing decomposition, probably dependent on special chemical conditions of the blood, by which, for example, herbivorous animals are enabled to convert very large quantities of atropine into relatively inert tropine substances; and on the property which certain organs, and especially the liver, possess of absorbing and retaining toxic substances and of thus preventing their access to the structures on which they act in quantity sufficient to be hurtful. In the case, further, of many organic poisons, absorption and diffusion are impeded by the walls of the cells, as in the instance of the slow absorption of strychnine through the stomach walls and of many albuminoid poisons through the intestinal epidermis.

These explanations, however, do not account for all the observed phenomena, and it must in the meantime be assumed that tissues may gradually become accustomed, possibly by exhaustion, to the perturbations produced by substances which modify their normal condition, so that by-and-by a tolerance is induced.

Anticipating some statements which will afterwards be made, a fundamental difference exists between both congenital and acquired defence against ordinary poisons and that resulting from the action of disease toxins, venoms, and such-like poisons, in so far that in the former there is not produced in the blood any substance which plays the part of an efficient counter-poison or antitoxin.

The subject has, however, gained a new importance from the remarkable facts discovered in connection with the poisons generated by pathogenic micro-organisms, and in connection also with other poisons of very similar chemical composition, represented especially by the venom of serpents and by the vegetable products abrin and ricin.

It had long been known that many infectious diseases conferred upon those who had suffered from them a power of resistance against subsequent attacks of the same disease. After the discovery had been made—and to this I have already alluded—of the microbian origin of infective diseases, it was experimentally shown that if the microbes constituting the cause of any infective disease were inoculated into animals, not only were symptoms of the disease produced, but also that the animal, if it survived, reproduced still further the events of an infectious illness, by acquiring a power of successfully resisting the morbific influence of the same microbes subsequently inoculated. It has likewise been found that each of these events could be reproduced by the filtered, and therefore microbe-free, solution in which the pathogenic microbes had been cultivated, and thus it was demonstrated that neither the original disease nor the subsequently acquired production was actually due to the microbe, but to toxic substances produced by it.

From this position the further great advance was made that the blood serum of protected animals, itself destitute of poisonous properties, when introduced into non-protected animals conferred upon them a resisting power which might be so great that even large lethal doses of the virulent micro-organism and of its toxin no longer produced death or even symptoms of poisoning.

These remarkable results of experiment deservedly claim much attention. They irrefutably demonstrate that infectious diseases are in their essence poisonings; they throw much light on the mystery, previously shrouded in metaphysical phrases, of the nature of the protection acquired by attacks of infectious disease or conferred by vaccination; and they have not only at once led to valuable therapeutic results, but they indicate further applications, both in the prevention and treatment of disease, exceeding in their possibilities any expectations that had previously been originated by discovery in medical science.

Inquiry into the nature and cause of this protection has thereby been removed from the position of speculation long occupied by it to one in which experimental methods could be pursued with some hope of solving the problems. Many of the results, however, are yet difficult to explain, and considering that new facts bearing upon them are almost daily being obtained, it is not to be expected that altogether satisfactory solutions had been found or unanimity of opinion obtained. More especially does this apply to the nature of the process whereby protection or immunisation is obtained, to the origin of the protection-producing substances or antitoxins, and to the manner in which they act as curative or therapeutic agents.

As in the case of some of the ordinary poisons, mineral and vegetable, it may be admitted that a portion of the acquired protection is due to the tolerance brought about by the accustoming of the structures of the body to the action of the poison, but this tolerance could not continue for the long periods during which acquired immunity sometimes persists after the infected disease has been recovered from. It may also be admitted that pathogenic micro-organisms absorb and thus remove from the body certain constituents necessary for their growth and vitality, whose removal may, to some slight extent, render the body unsuited for the further growth of these organisms; but, apart from other objections that might be advanced, it is inconceivable that this cause could operate in the bodies of animals which so rapidly change the composition of all their constituent parts, and that therefore the substances which have been removed would not very soon be again restored to the body, and thus render it vulnerable to fresh infections.

The doctrine of phagocytosis, enunciated and ably and strenuously supported by Metchnikoff, in which protection is attributed to the power possessed by leucocytes of absorbing and destroying microbes, may to a limited extent account for the destruction of living microbes, but it probably accounts to a greater extent for their disappearance after life is extinct; while it can have but little influence upon the soluble toxins which, since the introduction of the theory of phagocytosis, have been proved to be in most cases the true cause of the disease symptoms.

The frequent persistency of immunity not only exemplified in the after-history of patients who have recovered from certain of the infectious diseases, but also in vaccination against small-pox, as it alone serves to disprove each explanation yet advanced of the essential nature of acquired protection, must be taken into account in formulating explanations. The micro organism of an infected disease introduced into the body produces the characteristic symptoms of the disease, and, if the animal recover, subsequent inoculations of this micro-organism no longer produce any injury. The animal has become protected against the disease, and there is abundant clinical evidence to show that in the case of the majority of infectious diseases the immunity lasts for many years. The pathogenic organism of the same disease cultivated outside the body produces a toxin which when administered to an animal likewise reproduces the symptoms of the disease, and if the animal recover, and further quantities of the toxin are successively administered, an immunity may be acquired so great that the animal suffers but little inconvenience when 50 times the minimum-lethal dose, or even a larger quantity, of this toxin is now administered to it. The immunity acquired in the latter case is, however, only of short duration. I do not know if the duration of it has been defined with any of the toxins of disease, except with the toxin of diphtheria, and Roux and Klein have shown that with this toxin it lasts only from five to seven days. Enough, at least, has been done to show that it is brief when compared with the immunity produced by the microbes from which the toxins had originated, and Klein remarks that a serum which may be relied on to afford any durable protection is still a desideratum. It is also interesting to note that Monckton Copeman has found that lymph filtered so as to remove from it all solid particles, and, therefore, presumably all micro-organisms, can produce only a briefly lasting protection against unfiltered vaccine lymph of normal potency. In the case of the venoms of serpents—which in composition and other important respects, are analogous to the toxins of disease—the duration of immunity has, however, been defined; and experiments have shown that if an animal be protected so as to survive the minimum-lethal dose of the cobra venom, the protection produced against the same dose of venom does not last longer than a few hours; and even when the process of the immunisation has been carried so far that the animal can survive four times the minimum lethal, the protection against this dose of venom exists for only thirty days.

The protecting substance, antitoxin or antivenin, which appears in the blood after inoculation with pathogenic microbes, or after the injection of toxins or venoms, is chemically unstable, and is subject also to the general processes of elimination. Its presence in the body, even when the quantity of toxic substance to which it owes its origin is greatly above the quantity of toxin which has been elaborated in a case of infectious disease by the pathogenic organisms of that disease, is to be measured by days only; and, nevertheless, the protection produced in a patient by an infectious disease may apparently endure for a lifetime, and the immunity from small-pox gained by vaccination for at least seven years. It appears to me impossible to explain these contrasting facts on any other supposition than that, in the instances of prolonged immunity, successive supplies of the antitoxin of the disease, or of small-pox, must be furnished to the body during the time that protection continues. It is not possible, however, that these supplies could emanate from the pathogenic organism itself, for the life of the host would not endure were it retained in the body in its condition of original virulence.

(To be continued.)

SCIENTIFIC REASONING.

The well-known *litterateur* and member of the French Academy, M. Brunetière, wrote recently a review of the Dreyfus case, in the course of which he commented caustically on the part taken by scientific men and "intellectuals" (to use the current slang of the day) in the controversy. M. Duclaux, the director of the Pasteur Institute, was specially referred to. "How," asked M. Brunetière, "can it be proved that a 'Treatise of Microbiology,' which is perhaps a compilation destined to be sold as waste-paper in twenty-five years, requires more intelligence than is necessary for judging one's fellows or for commanding armies?" M. Duclaux has replied by an article in the *Revue du Palais*, in which he commences by regretting the "breeze of madness that has blown over France." He twits M. Brunetière with not knowing what science is—"he see it where it is not, and cannot see it where it is"—and then continues: "What is scientific reasoning? Simply this, a reasoning made with a salutary fear of making a mistake and an earnest desire to escape it. A *savant* avoids an error as a good Catholic flees from sin, only the former runs less risk of succumbing, because his great care is to abstain from seeking the force of resistance in himself. What saves him generally is that, once his reasoning made, he hastens to find an outside test of the veracity of his discovery. Each scientist takes such means as he has; the astronomer by observation, the chemist by experiments, &c. The great thing is that researches are made honestly and without prejudice, taking the material of their conviction outside of themselves, beyond the surroundings in which the judgment they desire to verify was formed." M. Duclaux goes on to say that he hopes his "Treatise of Microbiology" will become waste-paper within a certain number of years. He hopes the rising generation will far outstrip him. "For every *savant*, if he is wise, must know that what he writes is an imperfect truth destined to be effaced, although leaving a trace."

An Advertisement.

£2 to anyone giving full particulars of a good opening for a Veterinary Surgeon, provided the information is acted upon.—Address, Mr. Malloch, Kirkby Stephen.

MILK FEVER IN COWS AND ITS LATEST TREATMENT.

Sir,—During the last three months this disease has unfortunately been much more than usually prevalent, doubtless due to the direct and indirect effects of the season; and it is of the greatest importance in a district where so many cows are kept to convey to the stock-owners some idea how this distressing malady may be

prevented, and if it should occur, what chance there is of the animal's recovery.

Experience proves that the best method of prevention is to allow calving to take place under the most natural possible circumstances. It is not sufficient to get the cow in low condition and then make an invalid of her immediately after the calving, omitting the exercise necessary to the animal's health. On the contrary, she should be put where she has to work for her living, and this to be continued for a week after parturition. Amongst other preventives a dose or two of opening medicine is advisable, but the cow should not have salts at the outset of the disease.

In this neighbourhood too many people have an idea that milk fever is necessarily fatal, and this arises from the fact that under treatment remote and erroneous there have been in certain instances very few recoveries. Therefore, those stockowners who are not already acquainted with the fact, will be glad to learn that some practitioners of veterinary medicine have been able to record for four or five years seventy-five per cent. or more of recoveries, under improved methods, the latest addition of which is the injection of medicine into the udder, first practised by Vet.-Surgeon Schmidt, of Kolding, in Denmark, and introduced to English veterinary-surgeons by Mr. Myall in January of this year. When, however, some practitioners have injected a solution of only one-fifteenth the strength used by Schmidt the results have not been so satisfactory even as cases treated by some of us on other modern lines. In those cases which have been suitable for the adoption of this treatment, those of us who have carefully carried it out, and with full doses, consider we have another valuable aid. Therefore it is evidently more profitable, by far, to the owner, to obtain the best possible skilled treatment rather than allow the cow to take her chance, or, perhaps, rely on quack medicines (warranted to cure every complaint!) which have been found beneficial in a few cases.

It is perhaps necessary to add that it is not possible to give prescriptions for the treatment of this disease, as besides drenching there is much else to be done, and medicines are varied, more or less from hour to hour, according to the requirements of the case, showing the necessity of the best obtainable expert judgment, the profit of so doing, and the consequent importance thereof.—Your obedient servant,

A. T. Hutton, M.R.C.V.S.

Barnstaple, July 20th, 1898.

[The above cutting, from a West of England paper, is sent by Mr. E. R. Harding.]

CORRESPONDENCE

MILK FEVER—SCHMIDT'S TREATMENT—HONOUR TO WHOM HONOUR IS DUE.

"Veterinary surgeons throughout the country have been greatly interested during the past two or three months in a new method of treating milk fever among cows—one of the most serious evils which the dairy farmer in a rich pasture district like North Devon has to contend with. The new treatment originated with a German practitioner, but it was owing to a report as to the success of the method when tried in North Devon that the general attention of English veterinary surgeons was directed to the process. Mr. W. Penhale, F.R.C.V.S., of Barnstaple, was the first English practitioner to make public his experience of the new treatment, his communication—which excited widespread interest and led to Mr. Penhale receiving letters of thanks and congratulation from veterinary surgeons in all parts of the country—appeared in *The Veterinary Record* in May. Up to Saturday last Mr. Penhale thought he was the first practitioner in England to apply the new remedy, but it appears that a veterinary surgeon in Lincolnshire tried the experiment a short time previously. The success of the process is undoubted, the improvement in the fatality record under the new treatment being very marked, so that English farmers and dairy-keepers will have good reason to be grateful for this latest development of veterinary science. It may be mentioned that Mr. Thomas, who was up to last week Mr. Penhale's assistant, designed an ingenious apparatus for use in connection with the process, and this (a great improvement on the German method) is now being produced by the leading manufacturer of veterinary apparatus and is likely to be generally adopted. So that North Devon has had a very close and very noteworthy connection with the departure."

Sir,

According to the above paragraph in *The North Devon Journal* (published in Barnstaple July 28th) it appeared that Veterinary Surgeon Schmidt and Mr. Mayall, to whom we are so deeply indebted, have sunk into insignificance in the eyes of the profession in comparison with Mr. Penhale's record of his almost useless 10 grain injections, (see Mr. Barron's letter July 9th, paragraph 4, where he says we can get at least 50 per cent. recoveries with the sedative treatment). We do not wish to deprive Mr. Penhale of the credit (?) of being the first to publish results of injecting a solution of the iodide, one-fifteenth the strength of Schmidt's, but to say that he has received the "thanks and congratulations of veterinary surgeons in all parts of the country" for so doing is obviously unfair to the gentlemen above mentioned, to Mr. Clarke, of Wragby, and the authors of similar valuable experiences.

The editor of *The North Devon Journal* is peculiarly well acquainted (?) with the contents of *The Veterinary Record*—the identity of the author of the article quoted is not concealed.

North Devon has indeed something to be proud of in the substitution of an ordinary rubber syringe for a funnel.

I am sure we shall be very grateful for more experiences of Schmidt's treatment pure and simple. My results for the last fortnight have been four recoveries out of five cases. Schmidt's injection was used in all but one—this not the fatal one—and chloral or stimulants as appeared best.

A. T. Hutton.

Barnstaple, Aug. 1st, 1898.

THINGS DEBATEABLE.

Sir,

Passing over the hackneyed dictum that anonymous correspondents seldom merit replies, it would seem to me that there is a lack of logic and scientific acumen in the letters appearing under the inappropriate heading of "Schmidt's Treatment of Milk Fever," in last week's *Record*. The one signed "A Four Years' Man" repeats ancient history, and might appropriately have been headed "Everybody's Treatment of Milk Fever." It is hard lines, and a bit of a reflection on poor Herr Schmidt to call the grs. x injection "Schmidt's Treatment," and I hope Herr Schmidt does not understand English, for his own sake.

"F.R.C.V.S." assumes that the recent correspondence is indicative of insufficiency of detail in articles contributed to *The Record*. Poor old contributors! Does not the correspondence in this case rather suggest (to put it mildly) insufficiency or inaccuracy of observation on the part of some of the readers of *The Record*. The

argument that grs. x of pot. iodide or *aqua pura* might be used I will let pass for what it is worth. Suffice it to say that the scientific man treats diseases according to their supposed pathology (as it appears to him), and judges of results by large percentages. The treatment with water would be empirical, because not founded on the supposed pathology of the disease.

I think the dangers of mammitis arising from "Schmidt's Treatment" ought, with due care, to be infinitesimal as a good antiseptic is being injected or infused, and what can be easier than to dip the teat syphon or vulcanite tube into the injection or infusion. One German veterinary surgeon relates cures arising from the injection of lysol. Granted that strict aseptic precautions cannot be religiously carried out in country practice, we can at any rate satisfy our scientific conscience by trying to carry them out to the best of our ability and circumstances

Only one gentlemen yet appears to have adopted Schmidt's method of injecting the udder, and that is by means of a teat syphon, a glass funnel, and a long india-rubber tube, but I opine that the method of injecting the udder is of minor importance.

The article translated in *Vet. Record*, March 26th, 1898, may answer the query whether it is advisable to inject more than once, and the remark by Kubaschewski in last week's *Record* on emptying the udder is worthy of note. Personally, I think Mr. R. W. Clarke, M.R.C.V.S., is deserving of much thanks for the carefully observed and well written about cases recorded in your last week's issue.—Yours faithfully,

G. MAYALL.

ADVERTISING AND PROFESSIONAL CONDUCT.

Dear Sir,

As Professor Penberthy has given notice of a motion he intends submitting to our Council respecting a definition of bye-law 113, we think some further discussion should be had on the subject for the guidance of our Council.

The motion gives us no definition of what is meant by the word "advertising." It simple points out a veterinary surgeon (by the bye does this apply to registered practitioners?)

1. May not advertise himself. (What does this mean?)
2. Nor cause or permit anybody else to do so.
3. Nor cause or permit a paid advertisement of any kind to appear in a paper.
4. Neither may an editorial article appear of any kind referring to a V.S.
5. Nor any other notice in the public press.
6. Neither may he cause or permit a circular, book, or card relating to his professional attainments, abilities, or charges to be circulated, nor anything relating to the medicines or appliances he prepares or sells.

In fact, according to this a veterinary surgeon may not announce himself (*i.e.* his knowledge) or his wares (*i.e.* his medicinal preparations) nor allow anybody else to do so. What utter nonsense all this is to us country practitioners.

The Council is going to try and stop the only *honourable* and *legitimate* way of bringing ourselves before the public, and does nothing to prevent the dishonourable and illegitimate methods. What we would suggest is that the Council should give us some idea of what forms of advertisements—if any—are permissible.

Professor Penberthy's motion says nothing about prohibiting veterinary surgeons—

1. Placing their names and qualifications over their business establishments.
2. Carrying on any other business in conjunction with that of their practice such as a shoeing forge, dealing in horses, dogs, etc.
3. *Placarding* a whole neighbourhood with a list of the operations he performs, and the prices he will do it for, also the medicines he prepares and the prices he will take for them; neither of which are disgraceful if only properly and honourably conducted.

The worst side of "advertising" the motion does not touch, viz., the really *disgraceful* side, nor the things which degrade our calling more than all the public advertising put together in the eyes of the public.

We belong to those who believe that advertising may very well be left to a tribunal appointed to investigate such cases as well as all other forms of so-called "disgraceful conduct," but we need to be careful in appointing this tribunal, for evidently some would not be fit to sit on it, because of their inability to discriminate between what is and what is not disgraceful. There is *disgraceful* advertising as well as *graceful*, and we should have men on the tribunal who can and will fairly discriminate between them.

Why we should be deprived of sending a circular, stating who and what we are, our place of business, the kind of practice we undertake, and the prices we charge we cannot understand, for there is nothing disgraceful in this, and no one thinks any the less of us as men for doing so, and *if they do let them, because such persons are no good to us or our calling*

No! gentlemen, let us prevent our members doing absolutely dishonourable actions, such as taking money and other presents for *purposely* giving wrong opinions about horses, etc., in other words wilfully "passing" *unsound* horses as *sound* ones. We fancy we hear someone saying, Oh! that is scandalous, it is never done—just as a gentleman once said he did not believe that veterinary surgeons "tipped" grooms to get their employers' work (practice)—and we then suggested that he should go and set up in practice in London, and in fact anywhere else now-a-days, except Cork, and he would soon prove it for himself. Others may say Oh! the law would be brought down on such men, but if they know the public as well as we *think* we do, they would know only too well that there are not many who will take the trouble, or go to the expense of applying to the law for their rights. Moreover, those who know the law and its actions can't blame them. We have heard it said "The law is only made for unprincipled men and those who have nothing to lose," and our experience leads us to believe there is some truth in it.

Then again advertising by *sending a friend to ask a client of another practitioner for his work.*

This only happened to us the other day under our very eyes and ears. We were in a hotel (advertising ourselves of course) talking to a client, when up came a brewer's agent and asked our client—who is your 'vet'? (whether were personally known to him or not we don't know) but of course our client felt himself in a very awkward position. and moved a few steps away, but we overheard the agent ask him to employ Mr. So-and-so who was a good man. Now this is the kind of advertising we shall have no tribunal to investigate, but we should have.

Also advertising *by going round to other practitioners' clients and asking for their work, and that at lower fees than they have been paying.*

This is constantly being done to ourselves, but some—and perhaps some of our Council too—would consider this *quite proper business* and only the way of the world, particularly if it succeeded, for they might then argue it shows that the man is the better of the two. We do not agree with this, it only proves such a practitioner would be "fittest" for the *clientèle*, but would any kind of advertising degrade our profession in such client's estimation? We venture to think not, and our experience leads us to believe a great percentage of horse and dog

men are of such a character. What does it matter to them how or when we advertise?

Advertising ourselves by *speaking disparagingly of another's practice or any particular case untruthfully.*

Many practitioners employ this method of advertising themselves. Only last week we attended a case of "gripes" unsuccessfully, and we paid a visit just after the animal died, so we made a p.m. at once—the owner being present—with the result that a knuckle (about a yard) of bowel was strangulated by passing through the mesentery, with of course all the usual discolouration and thickening, and we pronounced that to be the cause of death. A few days afterwards our client met us and said oh! Mr.——— Mr. So-and-so (another practitioner in the town) says that horse died of flatulent colic and it ought to have been saved, and was telling the story to several persons in the bar of ——— public house.

The same client called us in to attend another horse with colic yesterday, when he said "by-the-by Mr.——— I have an idea that horse that died the other day was subject to that disease." We asked why he thought so? He said "because Mr. so-and-so (meaning the other practitioner) said so." We endeavoured to assure him that nothing of the kind was the case, and that the animal probably never had colic before, and certainly not a strangulated bowel, because, if it had, it would have died, as few, if any, ever recover. Will your bye-law, as proposed by Professor Penberthy, ever stop such disgraceful conduct as this?

Then, again, *interfering with another practitioner's cases without his knowledge.*

Not long ago, we were treating a colic case, and between our visits a friend of our client (unbeknown to him) brought another practitioner to see the case, who enquired as to the treatment being pursued, and offered his own opinion on the case and what should be done. Of course, this may have been very kind and considerate towards our client and his horse, but what was it from a professional point of view? Why did he do it—as an advertisement? We know our client thought no worse of the man; such behaviour would not lower him, nor the profession to which he belongs, in his opinion, half so much even as it would ourselves, were we to have resented such treatment. Herein lies the inconsistency of the public, and the necessity for us to frame rules to regulate our actions among ourselves, and prevent such disgraceful, low, cunning conduct—but will bye-law 113 ever stop such practices?

Frequenting the company of horse-breakers, low-class horse dealers, grooms, etc., is another form of advertisement the motion does not deal with. We can imagine many will say "Well! and no harm in that either," and we agree with them on the same principle that we agree that there is no harm in a V.S. keeping a forge, or dealing in horses, or doing any other kind of business, so long as it is *honourably* done. But suppose the horse-breaker is a disreputable character, drunkard, or a man used by horsemen to do their "dirty work" for them. Is this the kind of horse-breaker or person fitted for a veterinary surgeon's company? And will such friendships elevate that practitioner or the profession of which he is a member in the eyes of the public? We do not even suggest that *all* this class of persons are of this character, neither would we say none of them are fit to associate with us, but we do say the *majority* of those we have ever known are not, and unless your bye-law stops this class of advertising, it is worse than useless to stop it from the press or by circular. If you do not attempt to check this disgraceful and dishonourable advertising, we may very well afford to leave the legitimate and honourable advertising alone, and let men use their own discretion in the matter—if you will—of course, subject at all times to the searching eye of our appointed tribunal, as to whether such advertisement is "disgraceful" or not. But when they think it is so, they should write and request the practitioners so offending to withdraw it, and, if he does not do so, then apply the punishment; and not allow any of our members to defy our Council, as Mr. Leeney has openly done, in the last paragraph of his letter on "Docking" in *The Veterinary Record*, vol. xi., p. 44, and so make them the laughing stock of the whole profession. Under the present circumstances, however, we do not say Mr. Leeney is to blame, because the law is as unjust as it is stupid.

However, we do not belong to the "Anarchists" of our profession, and would not invite any person or persons to disobey our laws, or be a party to organize any body to attempt to forcibly compel our Council to respect our opinions, or views, on this or any other matter. Although we have lively recollections of its being done not many years ago.

We country practitioners would urgently impress upon our Council the desirability of considering all sides of this so-called "advertising" question before taking steps to prevent its members using the honourable method of announcing (viz., publicly advertising) their professional standing, attainments, special abilities, and medicinal preparations together with the prices they charge for any branch of this calling; whilst they are taking no steps whatever to prevent the less fearless outlaws of the profession from doing all kind of dishonourable and disgraceful actions against everybody around them.

We would submit the following for our Council's consideration as the interpretation of Bye-law 113.

That advertising (*i.e.* public or private business (professional) announcement of any kind) whether personally or through another person be prohibited when considered (by the appointed tribunal) to be of dishonourable or disgraceful character, either in respect of its wording or the type used in printing.

N.B. All advertisements might be sent to the tribunal for approval before being circulated either by the press or otherwise.

It should be considered a disgrace:

1. To perform or offer to perform an operation for a lower fee than that prescribed by the R.C.V.S.
2. To sell medicines or their preparation or offer to do so below the price fixed by the R.C.V.S.
3. To personally canvas, or cause others to canvas the clients of other practitioners.
4. To interfere in any way with the cases under the care of other practitioners in their absence.
5. To slander or backbite another untruthfully in any way.
6. To give false evidence in a Court of Law.
7. To connive with others to defraud or otherwise trick or injure another.
8. To wilfully give false or wrong opinions.
9. To receive gratuities except for professional services rendered.
10. To buy custom by "tipping" or giving percentage to grooms or other persons.
11. To meet registered (?) or unregistered practitioners in consultation (except in a similar manner to a doctor meeting a nurse).
12. To attend or treat any case that is being, or if you like *has* been, treated by an uneducated person, or even with a quack medicine.
13. To be guilty of any other act the tribunal may consider disgraceful.—Faithfully yours,

NEMO.

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